Date of Meeting: **Participants:** **Purpose:**	Room: LL 432, 830 Union Plaza Center **Representatives from ITA, EAI, Pearson, CSC, and FSA.** **FAFSA Performance Test Weekly Status Meeting**	
Agenda for 12/30/2002		
Conference call details:	**1-877-714-6338; Meeting ID: 4104 @ 3pm**	
Responsibility	**Time**	**Topic**
Roshani Bhatt	60	▪ Review Open action items ▪ Review post go-live performance test plan for FAFSA.

New and Open Action Items

No	Date Identified	Action Item	Responsible	Status	Severity	Target Date
1	10/30/02	Post performance test cycle 8: PIN Test Harness (hosted on Su35e11) had very slow response time during the PIN performance test. 11/11/02 - Ran out of TCP connections on SU35E11. Bob will work with Keith to set some parameters correctly on SU35E11. 11/18/02 – CSC needs to monitor the network. 12/02/02 – Test harness running out of memory problem has been corrected. Schedule retest, coordinate with Chad Simmons. 12/04/02 – Performance test cycle 15b tested Web Services. The test showed that TestClientServlet does not close the connections, so after running the test for 20 minutes all the users who are using Web Services failed. This issue is being investigated by ITA and Pearson. 12/09/02 – Connections being dropped (left hanging) – 200 connections. 12/18/02 – This was recreated during the performance test. The test ran for 20 minutes and observed hanging connections. ITA team is working with CSC to investigate the possibility of a firewall networking issue. 12/19/02 - The PIN test harness opens the connections but does not close the connection. Matt Kain informed that there is not a way to close a soap connection. CSC's firewall allows only 25,000	Bob Wehrle / Chad Simmons	Open	Medium	12/20/02

		connections in the test environment and the connection time out is set to 2 hours. In production the firewall allows 200,000 connections and the connection time out is set to 1 hour. Thus, during the performance test there were 500 users running web services and in about 30 minutes all 25,000 connections were used up. Thus, we were getting slow response time and failure. The ITA team is working with CSC and Pearson to resolve this issue. 12/23/02 - CSC suggested that there is a problem with Firewall code in the performance test environment. CSC is looking into the option of setting the performance test firewall same as production so that timeout is set to 1 hour and the number of connections will be increased. DLSS is not planning to use the PIN Web Services in January.				
2	11/11/02	WAS Outstanding issue from FAFSA 6.0 Production: Hung process 11/11/02 - Recreated in the performance test environment and the log info was sent to IBM. 12/19/02 – IBM suggested turning some parameters to recreate this issue. In order to recreate this issue CPU on server needed to be at 100% utilization. This problem was recreated and the logs were sent to IBM. This problem could not be recreated by making CPU 80% busy – in order to recreate this issue CPU had to be 100% busy.	Roshani Bhatt / Bob Wehrle	Open	Low	12/20/02
3	11/22/02	The performance test that was conducted on 11/22 (to stress the CICS and DB2) showed that the backend needs to be configured for the FAFSA peak. The test was ran with the following configuration/protocol. Configuration: CICS MAXTASK=75 DB2 MAX THREADS=15 DB2 Protocol: Close the MQSeries - CICSPTST bridge Generate a number of messages to the MQSeries queue Open the MQSeries - CICSPTST bridge The CPS mainframe will need to deliver 96 MIPS to the FAFSA 7.0 application in order to sustain a throughput rate of 30 transactions per second (30/48 times 70% times 219 MIPS). This leaves 123 MIPS available for other work (approximately last month's peak hour demand). · The CPS mainframe will need to deliver 153 MIPS to the FAFSA 7.0 application in order to sustain a throughput rate of 48 transactions per second (70% times 219 MIPS). This would leave approximately 66 MIPS available for other work, which, depending on the time of day, might not be enough. · The CICS configuration needs review:	Tom Puddicombe	Open	Medium	12/20/02

		· Fewer DB2 threads were available than were transactions wanting to use DB2. It is not known how increasing the number of DB2 threads will affect transaction throughput. It is expected that increasing the number of threads will increase CPU demand, memory demand, and quite possibly I/O rate · Transactions were unable to start in CICS due to the MAXTASK limit. Increasing the value this parameter will increase the number of concurrent transactions. This will increase CPU demand and will also affect the required number of DB2 threads. · Should the FAFSA 7.0 workload be merged into one of the existing production CICS regions, or should it be placed in its own CICS region. This introduces issues of availability in addition to performance. · The DB2 configuration needs review: · How will increasing the number of CICS (FAFSA 7.0) threads affect DB2. · DB2 buffer pool statistics need review to determine how much adjustment to the number of buffers in each of the various pools is required to handle FAFSA 7.0. · What'll be the performance impact of changing CICS's ACCOUNTREC parameter from "NONE" to "TASK". The parameter change causes DB2 to cut one accounting record per CICS task instead of one accounting record per thread termination. There will be more DB2 accounting records, greater statistical detail, easier quantification of the overheads associated with each of the various CICS tasks, but at the cost imposed by the data collection process. 12/02/02 – Tom suggested to change the DB2 threads and run this test again. 12/05/02 – It was decided that LoadRunner with four N-class machines was generating sufficient load to stress the back-end. CPS configuration required: Data is backing up on the CPS MQ instance – specifically the DPL bridge. "Thread" limitation is perceived to be the issue. This issue arose after the DB2 tuning issue was resolved. Next step: Considered starting another instance of the bridge to provide more throughput. The CPS dead lock and VDC network issues prevented a clean test and clear direction for resolution. This issue will be tested during cycle 15c (12/05/02). 12/06/02 – DB2 tuning was performed during cycle 16b. The thread count was increased to 40 and a high water mark of 32 threads was observed. Further DB2 tuning will be carried out. 12/18/02 – A separate stub was created to generate load on the back-end, so the backend can be tuned properly for peak. Running this program produced issues which CSC is investigating. 12/19/02 - Another test was planned outside of the performance test window to stress and tune the				

		backend. CSC is working with Accenture and Pearson to tune the backend. In this test it was discovered that the CICS CPU reached its max and FAFSA might not be able to handle the peak volume with the current backend configuration. 12/23/02 – CSC has contacted IBM MQ/DPL/DB2 SME to tune the backend. 12/27/02 – CSC, Accenture and Pearson had a meeting regarding tuning the backend. It was agreed that CICS needs to support about 125 transactions per second during FAFSA peak (i.e. PAFSA + IDC + other applications). From the FAFSA PRR meeting, the client expressed an interest to do the performance test using Shadow Direct. Roshani is working on a plan to do the performance test with Shadow in January. Scott Gray opened a severity level 1 ticket with IBM and Gary Adams is communicating with IBM to get the IBM performance team to review performance test data and make recommendations for additional tuning.				

Completed Actions

No	Date Identified	Action Item	Responsible	Status	Date Resolved/Due
1	9/17/02	Provide Rich Ryan with change request for the session database to be converted to 16k	Roshani Bhatt	Closed	9/19/02
2	9/17/02	Send out an updated version of the Performance Test Plan with comments from the meeting.	Roshani Bhatt	Closed	9/18/02
3	9/23/02	Build, load, and test DB2 for FAFSA performance test environment => 4:00 PM on 9/25/02	Gabriel Perez	Closed	9/25/02
4	9/25/02	Set up meeting to discuss performance test plan.	Mike Cline / Roshani Bhatt	Closed	9/25/02
5	9/25/02	Fill out a FAFSA Renewal functional script creation is problematic, as the code is not stable in the environment.	Matt Kain	Closed	9/26/02
6	9/30/02	Determine number of records available for Renewal business process => ~1350 records	Bill Schulte	Closed	10/7/02
7	9/30/02	Determine where invoker web services will be placed	Matt Kain / Jeff Farris	Closed	10/10/02
8	9/23/02	Problem with MQ/CPS/CICS is NCS code is generating error messages. Scott will work with NCS to implement solution. This was caused by data type mismatch. The root cause of data mismatch was NCS was testing some functionality and was sending bad data to the CICS bridge. This code is fixed and we have not seen the error.	Scott Gray / Dan Butler	Closed	10/7/02
9	9/25/02	Scott Gray to write formal email documenting the MQ/CPS/CICS problem	Scott Gray	Closed	10/7/02
10	9/30/02	Update Performance Test Plan high-level document following discussion about schedule	Roshani Bhatt / Mike Cline	Closed	10/10/02
11	9/30/02	School Code Search needs to invalidate sessions: FAFSA Performance test Cycle 1. ITA provided the JSP directive to NCS so that it will not create sessions. NCS used this directive on the school code search Performance test – cycle 3 proved that school code search is not creating sessions.	Matt Kain	Closed	10/10/02
12	10/3/02	WebSphere recycled during FAFSA performance test cycle 2. Performance test cycle 5 showed that WebSphere did not recycle. AMI was removed and code was added to talk to MQI interface. This fixed the WAS recycle issue.	Bob Wehrle / Scott Gray	Closed	10/18/02

13	10/14/02	Verify kernel parameter settings from HP – Bill Gardner verified kernel parameters with HP.	Bill Gardner	Closed	10/21/02
14	10/16/02	The CICS region was being crashed due to developers putting messages on the queue after the messages had been run through a translator, which is the wrong procedure when using the Java MQI interface. Scott needs CSC's assistance in diagnosing CICS region to determine whether this can happen in other scenarios. CSC to identify someone to work with Scott.	Scott Gray / CSC resource	Closed	10/18/02
15	10/16/02	PIN performance test environment needs Verisign certificate installed.	Bill Gardner	Closed	10/29/02
16	10/24/02	Due to CPS upgrade ITA may not have the ability to use the performance test environment for three and one half business days. This may affect the writing of functional scripts and recording of LoadRunner scripts, which could in turn adversely affect FAFSA performance test schedule. Action Item: Communicate this impact to stakeholders. Resolution: Upgrades completed ahead of schedule.	Roshani Bhatt	Closed	10/29/02
17	10/24/02	PIN requires a dedicated session database. ITA submitted a change request to CSC. Resolution: Reuse SESSSTG – 8K database.	Rich Ryan	Closed	10/29/02
18	9/30/02	Provide test harness for PIN performance test. Test harness is ready but PIN perf. test environment issues prevent implementation. Possible solution: 1) Add a servlet to the Sun perf env that LoadRunner (LR) scripts can call with parameter auth. 2) Set up a LR script to call the HTML version of authentication. The LR script will start by pointing the performance test URL. Replace the "https://dev.pin.ed.gov:8443" with what ever the PIN Perf env URL is going to be. The successful and unsuccessful params can be left alone. Hence, the user will start right on the PIN auth HTML page. Enter your stable data and pin and then you will just be redirect back to the FAFSA home page. 10/30/02- PIN test harness was tested.	Matt Kain / Bob Wehrle	Closed	10/30/02
19	10/11/02	WebSphere dropped the session table during FAFSA peak: This is an outstanding WAS issue from production. IBM provided the fix for WAS 3.5.6 and it did not work - Perf. Test cycle 4. Bob will work with IBM to get the right fix. 10/29/02 – This was tested with a new patch provided by IBM. During test cycle 8. We were able to recreate this issue without the fix. Applied the fix and ran the test. Session table did not drop. This issue is closed. However, it will be monitored throughout the FAFSA performance test.	Bob Wehrle	Closed	10/30/02
20	10/28/02	eSignature business process was not tested as part of the performance test effort for FAFSA 6.0. No issues have been reported in production. The benefit of performance testing eSignature business process for FAFSA 7.0 may be marginal. ITA proposes to substitute eSignature performance with Fill Out a FAFSA 6.0 business process. Got approval from ED.	Roshani Bhatt	Closed	10/31/02

21	11/01/02	Roshani presented idea of replacing eSignature with Fill Out a FAFSA 6.0 option to ED. ED approved this request.	Roshani Bhatt	Closed	11/15/02
22	11/06/02	Post-Cycle 9: Configuration: One web server and one application server (both N class machines)- JVM 1GB. We were running four scripts with the following distribution: Fill out FAFSA 7.0: 15%, FAFSA Correction 7%, FAFSA - tempSave 70%, Fill out FAFSA 6.0 8% and 1000 users. Java out of memory was observed which indicates a memory leak 11/19: We received this error because there were too many request coming from the webserver. We increased the number of clone from one to two which resolved this issue.	Bob Wehrle	Closed	11/11/02
23	9/17/02	Organize a meeting to discuss OC3 link test. Objective of OC3 link test is to ensure peek FAFSA load can be sustained, the following are the test goals: ▪ Hit FAFSA home page with 90K file ▪ Hit FAFSA home page with 6K GIF file ▪ FTP test ▪ Tune web servers (max client, NDD) Chad needs to confirm the test date. Test is currently scheduled for 11/17. 11/11/02: Question raised: ▪ Can this test hit the performance test environment from the Internet? ? The FASFA performance test team has not received any plans regarding this test from CSC. ? Roshani will follow up with Chad. 11/16/02 – Test was conducted by Mercury Interactive in conjunction with CSC. 11/18/02 – Performance test was conducted hitting FAFSA home page with 1000 users yielded 120 Mb/sec throughput, and 147 Mb/sec utilizing a test GIF file with 400 users.	Roshani Bhatt / Chad Simmons	Closed	11/18/02
24	10/14/02	Report performance test results and compare production requirements. 11/15/02 – Presentation capturing the performance test results was sent to CSC and Pearson. 11/19/02 – The performance test result (preliminary input for peak hardware) was presented to CSC and ED.	Roshani Bhatt/ Mike Healy	Closed	11/15/02
25	9/17/02	Send Bob Wehrle and Will Brownlow information on WebTrends configuration. Save IHS logs. 10/29/02 – Saved IHS logs and sent to Bill. 11/18/02 – Bill sent logs to Mike Gonzalez and Don Cherry who are looking into this matter. 12/02/02 – Bill stated that WebTrends is capable of handling logs.	Bill Gardner	Closed	12/02/02

26	10/16/02	Security measures must be implemented to control the number of individuals who may put messages on a queue. Individual access should be controlled with User IDs who may put messages from specific IP addresses. This action is necessary to prevent the potential of one message shutting down the application. This issue is related to issue number 3. 11/18/02 - MQ configuration for IP security exits will be moving through the environments at the same time as the MQI Pooling code. The code is slated for deployment to the performance test environment on 11/22. Pearson needs to provide workstation IP address. 11/21/02 – Code was merged into the performance environment. Ready for performance test. 12/02/02 – IP filtering is in the performance test environment. Code was tested successfully by EAI & Pearson.	Scott Gray	Closed	12/02/02
27	10/24/02	Garbage collection was taking 3.7 to 7.0 seconds in the following configurations: ▪ Two web servers & one or two application servers ▪ Session database connections = 100 ▪ JVM at 1 GB Investigate reasons for seven-second garbage collection process, post performance test cycle 6 10/30/02 – Test cycle 8 – JVM set at 512 MB, garbage collection at 4 seconds. After garbage collection, session database connections jumped significantly. Need to investigate this with more tests. 11/5/02 - Test Cycle 9 configuration – two-web and two-application servers. One clone on each app server, heap size is 512 Mb. The thread count was reduced from 200 to 25. In production, the web thread count is 25. We were running four scripts with the following distribution:: Fill out FAFSA 7.0: 15%, FAFSA Correction 7%, FAFSA - tempSave 70%, Fill out FAFSA 6.0 8%. The test started with 400 users and we ramped up to 1025 users. During this test we noticed that the garbage collection took about 3.9 seconds and the session database connections did not jump. Session database connections were 49. Thus, reducing the thread count resolve this issue. This issue will be monitored throughout the performance test. 11/18/02 – HPN3 with 8 x 360 MHz was used as an app server in previous tests. Due to this configuration garbage collection time was higher. 12/02/02 – If the heap is 1GB garbage collection takes 7 seconds. Heap size was reduced to 512 MB and the garbage collection took about 4 seconds.	Bob Wehrle / Roshani Bhatt	Closed	12./02/02

28	11/01/02	In the performance test environment there are two 'L' class web servers and two 'N' class application servers. The 'L' class machines are causing a bottleneck to the application servers. 11/8/02 – Research & propose an option to obtain the N class machines for the performance test environment. 11/11/02 – Roshani sent the plan to everyone in the FAFSA production implementation team. Had a meeting with the FAFSA production implementation team to discuss the plan to get the 'N' class machines in the performance test environment. 11/14/02 – Jeff Farris sent updated server roll-out plan to FAFSA production implementation group which has step by step instructions to get N-class machines in the performance test environment. ED approved this plan. HPN13 and HPN14 will be re-networked in the performance test environment on 11/24/02. 11/25/02 – HPN13 & HPN15 are in the performance test environment. These machines will be returned to production environment by 12/11/02.	Roshani Bhatt	Closed	12/02/02
29	10/16/02	When max channels limit was reached on MQSeries, an EAI Null Pointer error was thrown. 10/29/02 – EAI is developing connection pooling code. This code will handle all the exceptions. This code is scheduled to move in the perf. Test environment by 11/22. 11/21/02 – Code merged on 11/21. This handles the null pointer exception. Ready for performance test. 12/03/02 – Performance test cycle 15a showed that this issue is not completely fixed. The following message was observed "array out of bound error." EAI team is working on this code. Scheduled to be in the performance test environment by 12/06/02. 12/06/02 – This was tested in cycle 16b successfully.	Scott Gray	Closed	12/09/02

30	11/07/02	Post-Cycle 10: Student Access creates sessions which are 18K. FAFSA session database is 16K. Row chaining issues were observed. CPU on the application server was running high (above 90% utilized). Research and present options (e.g. reducing the session size). 11/11/02- Actual session size is 8.8k (when serialize to a file) however when the session reach to the Oracle DB (sessions are padded and the session size becomes 18k). Session database is 16K thus when the session size becomes more than 16K we see row chaining. ITA will work with IBM support to find out resolution to this issue. Pearson will do some research to reduce session size for Student Access. Student Access script performs PDF generation. This was causing high CPU utilization on the application server. Pearson suggested that the LoadRunner script should be changed so that it will generate HTML file instead of PDF file. The script will be changed and we will test this by 11/25. 11/18/02 – Allocate more database space, Rich Ryan indicated that an additional database exists for FAFSA 7.0 that can be used for this purpose. 11/25/02 – Matt and Bob are working on what is being put on Oracle and why sessions are being padded. 12/09/02 – Allocating more space for session database for FAFSA 7.0 for next year (FAFSA 8.0), the application should reduce the session size.	Bob Wehrle / Matt Kain	Closed	12/09/02
31	12/06/02	Test cycle 16b – Messages were expiring on the bridge. This resulted in LoadRunner user failures. After some investigation it was found that FAFSA application has a 15 second time frame to pick up the message and bridge sees the time value as 1.5 seconds. As a result of this condition, messages were not queuing but expiring. The time conversion piece of the EAI code needs to be changed, so that the message can stay alive for 15 seconds rather than 1.5 seconds.	Scott Gray	Closed	12/09/02
32	9/25/02	Admin server is killed every 30 minutes performance environment: post-test Cycle 1 – in progress 11/18/02 – Dana Webb is researching the following issue: Keeping connection alive through firewall, increasing the TCP parameter. 12/09/02 – A parameter change fixed the killed server issue. 12/16/02 – ITA team has been dumping the file every 15 minutes to keep the admin server alive and will continue to do this for the rest of the performance test cycles.	Bill Gardner	Closed	12/16/02
33	11/26	12/02/02 – Deadlocks were seen during the performance test. The issue is a dead lock on CPS MQ processes – MQ logging dead lock causes stop to all messages. This issue is being handled by CSC, hence a GCARS should be logged. The patch is scheduled for installation on 12/08/02. 12/09/02 - Patches regarding the deadlocks were applied on 12/08. CSC and EAI expect this patch to solve this issue. 12/15/02 – Ran 5 performance tests after the patches were applied and the deadlocks were not seen.	Nancy Matesia/Scott Gray	Closed	12/16/02

34	12/10	Observed Java out of memory error on 12/12/02. There were 3000 users running in the system. WebSphere and IHS were not tuned. 12/12/02 – Tuned WebSphere. Increased JVM from 512 MB to 1 GB. 12/13/02 – Ran a test with 3000 users with two 1GB JVMs. No out of memory errors were observed. This issue will be monitored throughout the performance test.	Bob Wehrle	Closed	12/16/02
35	9/23/02	Find cause for MQ/CPS/CICS intermittent problem. Problem identified by Scott Gray (EAI). Scott is working with IBM to obtain the eFix. 10/29/02 - GTF traces will be formatted by CSC and sent to IBM. A conference call with IBM is scheduled for 11/5 11/11/02 - IBM needs the GTF traces reformatted. Scott will work with CSC to get this trace ready and sent to IBM. 11/18/02 – on 11/15 GTF traces were redone and sent to IBM for review. 11/25/02 – Scott received patch from IBM and will work with CSC to schedule the install. 12/02/02 – Patch is scheduled to be in the performance test environment on 12/08/02 – ECM 853. 12/08/02 – This patch was applied and backed out due to an issue. Logs were collected to send to IBM. 12/16/02 – A new patch was received from IBM. This patch was applied in the performance test environment on 12/16. 12/17/02 – Once the patch was applied Pearson and EAI tested this scenario by doing the following: ▪ Sent right data – data passed through ▪ Sent the reverse byte bad data – an error was received ▪ Sent the right data – data passed through It did not require the recycle the CICS region.	Scott Gray	Closed	12/17/02

36	11/11/02	Perf test cycle 11: Check status business process creates sessions. JSP creates session by default so a large number of sessions were created in the session database. Need to add JSP directive on the check status business process. Cycle 13 (11/19/02) – This business process was tested again and it was found that check status was not fully invalidating the sessions. The check status business process creates sessions but when a user clicks the exit button, it nulls the session rather than invalidating it. Thus the session remains in the database with size 0. Once the code is fixed this business process will be tested again. 12/17/02 – Tested this business process with 500 users. There were only 100 sessions in the database, hence the sessions were invalidated correctly.	Matt Kain	Closed	12/17/02
37	12/10/02	JSP – more than one clone on a server. Take a failure on 'init' trying to initialize JSP. Need to add a script to compile the JSP, WAS 3.5.6 comes with such a script. 12/17/02 – When using more than 2 clones are utilized – one clone will receive an error if the other one is trying to compile. To pre-compile a JSP file in a Web application in WebSphere there's config file in the bin directory that must be filled out with a set of parameters. Once the code merge is complete, and the config file is set up, typing the command "JSPBatchCompiler.sh" will re-compile the JSP. This script is to be run whenever WAS is restarted.	Bob Wehrle	Closed	12/17/02
38	12/06/02	Post cycle 16b: The following message was observed in the log file: Java. Lang.NullPointerException FOTWServlet – FOTWServlet.do Post: client's session values : SKIPINDEX : eoe [This value should have been blank] Investigation is required. 12/13/02 – Code was meged to resolve this issue. This issue was observed in the performance Cycle 18b (12/13). More investigation is needed. 12/17/02 – After some investigation it was found that this error was induced by LoadRunner. If there is a problem in the backend, the LoadRunner users jump from one clone to another and corrupt the session. This happened because Fill Out a FAFSA time for the LoadRunner script was set to 7.5 minutes (i.e. each transaction takes couple of seconds to finish). The clone might not have updated information which causes the session to corrupt.	Matt Kain/ Bob Wehrle	Closed	12/17/02

39	12/06/02	The system time changes and is padded by two extra zeros. This causes an large number of error messages in the log file: ▪ AFOTW Database pad String (), the length of the value to be padded ('10') is greater than the pad size ('8') ▪ getTime (); submit to mainframe/Oracle check the time-stamp length, "00" throws an error. 12/13/02 – Identified as a threading issue with a date / time stamp. Code was merged to resolve this issue. This issue will be kept open and the performance test team will monitor the log files to ensure its resolution. 12/17/02 – This issue was not seen in the performance test environment on December 16th and December 17th. The FAFSA code merged resolved this issue.	Matt Kain / Bob Wehrle	Closed	12/17/02
40	12/10/02	Message expiring on the bridge. 12/12/02 - MQ sync q – causes duplicates. CSC & EAI ran the utility program to resolve this issue. A ticket was opened with IBM for this issue on 12/13/02. During the performance test this issue was not observed. This issue will be monitored in future performance tests. 12/17/02 – This issue was monitored in several performance test cycles. We did not see this issue under high volume. The utility program needs to be run in the production environment so that this will not happen in production.	Scott Gray	Closed	12/17/02
41	11/11/02	WAS Outstanding issue from FAFSA 6.0 Production: Slow initialization of application server at start up. 11/18/02 – During FAFSA peak production there were 50 clones. Thus, restarting the app server took a long time. This year – for FAFSA 7.0 we are planning to have at most 15 clones for FAFSA during peak, so this issue would not occur. We will test this configuration with 8 clones in the performance environment. Roshani followed up with Joe Hala to see if this is still happening in the FAFSA 6.0 production environment. 12/16/02: This issue was tested in the performance test environment test environment with 10 clones and the application servers started within reasonable time (within 2 minutes). There were not any timeout messages. Joe Hala confirmed verbally that this is not happening in the production now. Pending email confirmation from Joe. 12/18/02 – Roshani received the confirmation email from Joe Hala indicating that this issue has not been observed in the FAFSA production environment for six months when CSC restarted WAS.	Roshani Bhatt / Bob Wehrle	Closed	12/18/02

42	9/25/02	Confirm the performance test dates to generate load on CPS: NCS to determine if mainframe load can be tested in Cycles 8 & 9 (11/12) 11/8/02 – Test Cycle 9 & 10 test: FAFSA correction was ran while the mainframe was running the batch processes to stress the mainframe. Batch processes that were generating load were causing issues, as DB2 locks were observed. Once NCS fixes the Batch process, the mainframe load test needs to be performed. The goal of this test is to measure how CPS would perform under load. 10/30/2002- Post performance test cycle 8: When FAFSA Corrections script was run some users failed during the test. DB2 deadlocks were observed during the test. Time out error was seen in the log file. There was a problem with batch process that Pearson was running. Pearson will fix the batch process and we will run this test again. 11/12/02 – Investigation found a batch processor problem where a cursor is not behaving correctly. Transactions were timing out and the batch processes were failing. An internal High priority ticket was opened. ETA for this ticket to be resolved is 11/13 and we will test this on 11/14. 11/21/02 – Gabe reported that this business process is ready to be tested. 12/02/02 – Correction records were not processed, hence this test could not be run this week. This test is scheduled to run on 12/18. 12/18/02 – Pearson recreated the load in CPS during FAFSA performance test successfully. During this test transaction abends were observed on compute, which is tracked as a separate issue. 12/19/02 – Ran this test again. DB2 service time was 0.02 seconds with 8% CPU utilization; CICS performed 533 transactions per minute. The batch job accessed FAFSA Correction records before the accessing the FAFSA application, thus abends occurred. This is a data loading issue and will not occur in production.	Gabe Perez	Closed	12/19/02

43	11/26/02	During Cycle 14b an issue was encountered with the CPS mainframe. Tom investigated the issue, here's the outcome of that investigation "Nancy Mathisen reports that IBM support thinks that today's MQSeries abend might be related to APAR PQ58704/UQ64230. There is a PTF available, which Nancy plans to get applied early next week. The subsequent restart of CPA1 was delayed because human eyeballs missed an outstanding message on a console somewhere. I can't fuss too hard, I looked at SYSLOG and I didn't see it either. MQ came back to life within seconds of that message getting its appropriate reply. Since the answer should be a constant (always "Y"), I'll initiate a request to the automation group to have OPS/MVS respond "automagically". I don't think anybody would accept an APAR against the "IEB EYEBALL" utility. 12/12/02 – Patches were applied on 12/12/02, however, during the test on December 13th (Cycle 18b) transaction abends were observed. CSC and EAI are working with IBM to resolve this issue. 12/16/02 - Several tests were run on 12/14 and the information was captured on a trace file and sent it to IBM. IBM provided the fix for abends. 12/17/02 – A new fix was received from IBM. The following is description of the problem provided by IBM: "What happens is that CKBR browses a message on the request queue and issues a START for a CKBP, passing the MsgId of the associated message. A Bridge Start Element, BSE, is created and added to the 'starting' chain. CKBR then browses to the end of the queue, and starts the browse again. The CKBP transaction then starts an issues a destructive MQGET (within syncpoint) for the messages based on the passed MsgId. However, CKBR has just had this message returned again, but is waiting to be dispatched on the QR TCB. The CKBP then runs to completion, syncpoints, and then removes the BSE from the 'starting' chain. CKBR is then dispatched on QR and searches for a BSE for the MsgId on the 'starting chain'. As such a BSE is not found, another CKBP is started, which then gets 2033 from the MQGET which results in the CKB5. A fix for this problem has been coded (changed CKBP so that it leaves the BSE on the 'starting' chain; CKBR will then remove the BSE when it searches the 'starting' chain'). As mentioned previously, I have recreated this problem on our test systems and have confirmed that the CKB5 abends to not occur with the fix applied. I have sent you a usermod containing the fix in anticipation that the customer will apply and provide feedback." This fix was applied in the performance test environment and several performance tests were conducted. The abends were recreated. CSC and EAI are working with IBM to resolve this issue. 12/18/02 – The patch was applied in the performance test environment on 12/17 and was tested on 12/17 and 12/18. No transaction abends were observed.	Tom Puddicombe	Closed	12/19/02

4	12/13/02	Timeout exception: No reply received within specified timeframe MQJE001: Completion Code 2, Reason 2033. This is not an EAI issue – EAI code is just capturing the timeout error. This will be seen any time anything causes a reply not to be received in 15 seconds interval specified by the FAFSA application. During the performance test DB2 was maxing its thread and transactions abends were seen which may have caused the timeout. This issue needs to be investigated. 12/17/02 – After some investigation it was discovered that, for unknown reasons, DB2 service time was increasing significantly which causes the DB2 thread count to be maximized at its limit of 40, which causes an error. Tom is investigating this issue with Pearson mainframe personnel. 12/27/02 –A PTF was received from IBM and applied in the DPL Bridge on the week of December 20th. Several performance tests were run after applying this PTF and the timeout errors were not seen.	Tom Puddicombe	Closed	Medium	12/20/02
5	12/13/02	Image Data Capture (IDC) stress test – encounter issues generation high load. 12/17/02 – Roshani and Bill worked to fit the IDC stress test in the performance test schedule for December 19th and December 20th. 12/19/02 – IDC ran their stress test during FAFSA performance test and encounter some is sues to generate the load. IDC ran their test on Thursday afternoon. The IDC stress test is outside the scope of this performance test so this issue is closed. 12/27/02 – Scott Meyer updated Roshani. IDC's target was 5500 documents per hour during peak. The majority of the processes are able to achieve above 9,000 documents per hour range so this issue is closed.	Bill Schulte	Closed	Unknown	12/20/02

Meeting duration on December 16, 2002: 50 minutes.

October 3 – **Cycle 2:**
- Call in #: 1-877-714-2900
- Meeting ID: 1035
- Time: 8:30 – 13:00
- Number of ports: 25

October 8 – **Cycle 3:**
- Call in #: 1-877-714-4777
- Meeting ID: 4620
- Time: 8:30 – 13:00
- Number of ports: 25

October 10 – **Cycle 4:**
- Call in #: 1-877-714-4700
- Meeting ID: 9098
- Time: 8:30 – 13:00
- Number of ports: 25

October 16 – **Cycle 5:**
- Call in #: 1-877-714-2900
- Meeting ID: 9098
- Time: 8:30 – 13:00
- Number of ports: 25

October 22 – **Cycle 6:**
- Call in #: 1-877-714-4777
- Meeting ID: 4620
- Time: 8:30 – 13:00
- Number of ports: 25

October 24 – **Cycle 7:**
- Call in #: 1-877-714-6338
- Meeting ID: 6511
- Time: 8:30 – 13:00
- Number of ports: 25

October 30 – **Cycle 8:**
- Call in #: 1-877-714-4281
- Meeting ID: 2741
- Time: 8:30 – 13:00
- Number of ports: 25

November 5 – **Cycle 9:**
- Call in #: 1-877-714-4281
- Meeting ID: 5883
- Time: 8:30 – 13:00
- Number of ports: 25

November 7 – **Cycle 10:**
- Call in #: 1-877-714-6338
- Meeting ID: 5207
- Time: 8:30 – 13:00
- Number of ports: 25

November 12 – **Cycle 11:**
- Call in #: 1-877-714-6338
- Meeting ID: 7028
- Time: 8:30 – 13:00
- Number of ports: 25

November 14 – **Cycle 12:**
- Call in #: 1-877-714-6338
- Meeting ID: 0610
- Time: 8:30 – 13:00
- Number of ports: 25

November 19 – **Cycle 13:**
- Call in #: 1-877-714-6338
- Meeting ID: 7028
- Time: 8:30 – 13:00
- Number of ports: 25

November 21 – **Cycle 14:**
- Call in #: 1-877-714-6338
- Meeting ID: 6985
- Time: 8:30 – 13:00
- Number of ports: 25

December 3 – **Cycle 15:**
- Call in #: 1-877-714-6338
- Meeting ID: 8307
- Time: 8:30 – 13:00
- Number of ports: 25

December 5 – **Cycle 16**
- Call in #: 1-877-714-6338
- Meeting ID: 9488
- Time: 8:30 – 13:00
- Number of ports: 25

December 9 – **Cycle 17**
- Call in #: 1-877-714-6338
- Meeting ID: 7039
- Time: 8:30 – 13:00
- Number of ports: 25

December 12 – **Cycle 18**
- Call in #: 1-877-714-4281
- Meeting ID: 3626
- Time: 8:30 – 13:00
- Number of ports: 25

December 16 – **Cycle 19 – Rescheduled for December 17th**
- Call in #: 1-877-714-6338
- Meeting ID: 7039
- Time: 8:30 – 13:00
- Number of ports: 25

December 18 – **Cycle 20**
- Call in #: 1-877-714-4281
- Meeting ID: 7428
- Time: 8:30 – 13:00
- Number of ports: 25

December 20 – **Cycle 21**
- Call in #: 1-877-714-4281
- Meeting ID: 9397
- Time: 8:30 – 13:00
- Number of ports: 25

December 23 – **Cycle 22**
- Call in #: 1-877-714-6338
- Meeting ID: 7039
- Time: 8:30 – 13:00
- Number of ports: 25

December 27 – **Cycle 23**
- Call in #: 1-877-714-4281
- Meeting ID: 9397
- Time: 8:30 – 13:00
- Number of ports: 25